



PIFSC External Review for Fishery Stock Assessments May 2014

Introduction and Charge to Review Panel
Sam Pooley, director

Estimating How Much Fish?

$$B_{\text{NOW}} = B_{\text{PREV}} + (R + G) - (M + C)$$

B_{NOW} = Total Biomass (e.g., weight) of Exploitable Resource

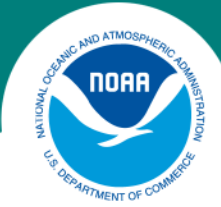
B_{PREV} = Total Previous Biomass Estimate

R = New Entries (Recruits) to the Stock or Population

G = Increase in Biomass due to Growth

M = Loss due to Natural Deaths

C = Removal from Fishery Catches



Introductions

- Sam Pooley, PIFSC director
- Michael Seki, PIFSC deputy director
- Christofer Boggs, Fisheries division chief
- Beth Lumsden, Fisheries deputy division chief
- Ned Cyr, NMFS Office of Science & Technology
- Rick Methot, NMFS senior scientist for assessments

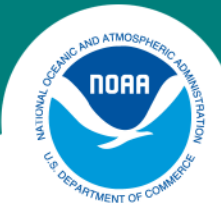




Introductions

- **Dr. Steve Murawski** (University of South Florida) – Chair of review
- **Dr. Yong Chen** (University of Maine, Bangor)
- **Dr. Keith Criddle** (University of Alaska, Fairbanks)
- **Dr. Steve Martell** (International Pacific Halibut Commission)
- **Dr. Cisco Werner** (NOAA Fisheries Southwest Fisheries Science Center)





Are we doing the right things right?

- To provide advice on improving the quality, relevance and performance of PIFSC stock assessments
 - Focus on modeling & assessment practices
 - Including timeliness & communication
 - Comments on prioritization & peer review process
 - Comments on PIFSC organization to support stock assessments
- Part of a national approach by NOAA Fisheries, including strategic planning

Purpose

The Pacific Islands Fisheries Group
and
Hawaii Fishermen's Alliance for Conservation and Traditions


Present an evening with

Professor Ray Hilborn

Author of "Overfishing: What Everyone Needs to Know"

FREE PUBLIC EVENT

6:30 – 9:00 p.m.
Wed. March 27th, 2013
Harbor View Center
Pier 38
Free Refreshments



Professor Ray Hilborn

Ray Hilborn is a Professor in the School of Aquatic and Fishery Sciences, University of Washington specializing in natural resource management and conservation. He teaches graduate and undergraduate courses in conservation, quantitative population dynamics and risk analysis. He co-authored "Quantitative Fisheries Stock Assessment" with Carl Walters in 1992, and "The Ecological Detective: Confronting Models with Data" with Marc Mangel, in 1997 and has published over 200 peer reviewed articles. He serves on the Editorial Boards of 7 journals including the Board of Reviewing Editors of Science Magazine. He has been a member of the Ocean Studies Board of the National Research Council, and the Scientific Advisory Panel for the Presidents Commission on Ocean Policy and the Independent Science Advisory Panel for the Commission for the Conservation of Southern Bluefin Tuna. He has received the Volvo Environmental Prize, the American Fisheries Societies Award of Excellence, and the American Institute of Fisheries Research Biologists Outstanding Achievement Award. He is a Fellow of the Washington Academy of Sciences, the Royal Society of Canada and the American Academy of Arts and Sciences.

Harbor View Center HAWAII

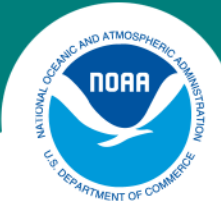
Hawaii Seafood Association

HAWAII TONGAREVA ASSOCIATION

POP FISHING MARINE

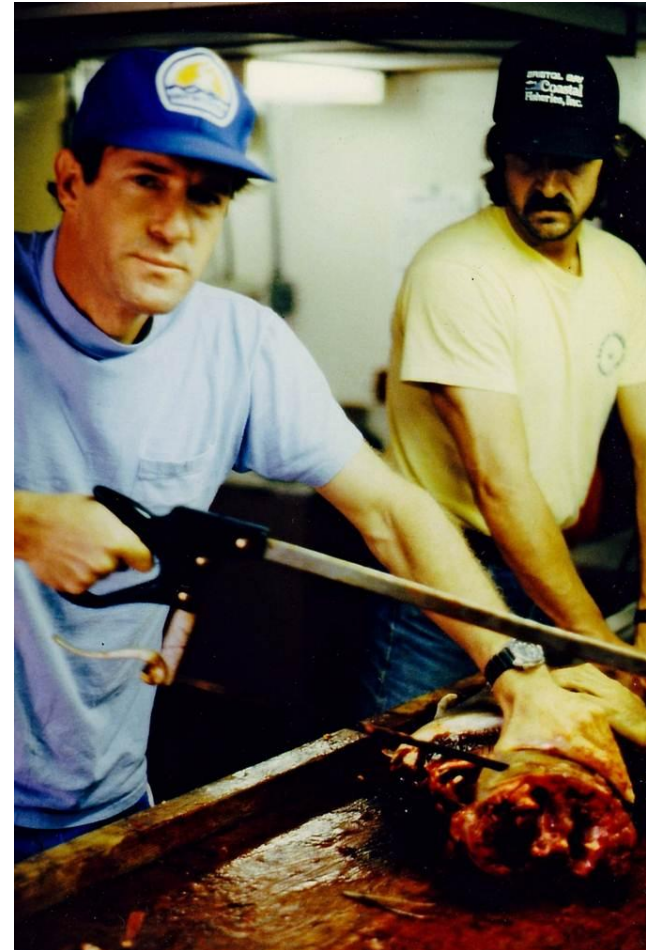
United Fishing Agency

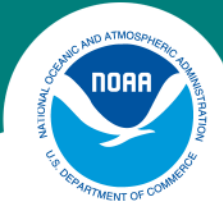
www.fishtoday.org
www.facebook.com/fishtoday



Structure of the Review

- Overview of Center
- Fisheries division organization
- Information available for stock assessments
- Prioritization
- Typical stock assessments
 - Blue marlin
 - Bottomfish
 - Reef fish
- Future approaches





PIFSC Mission

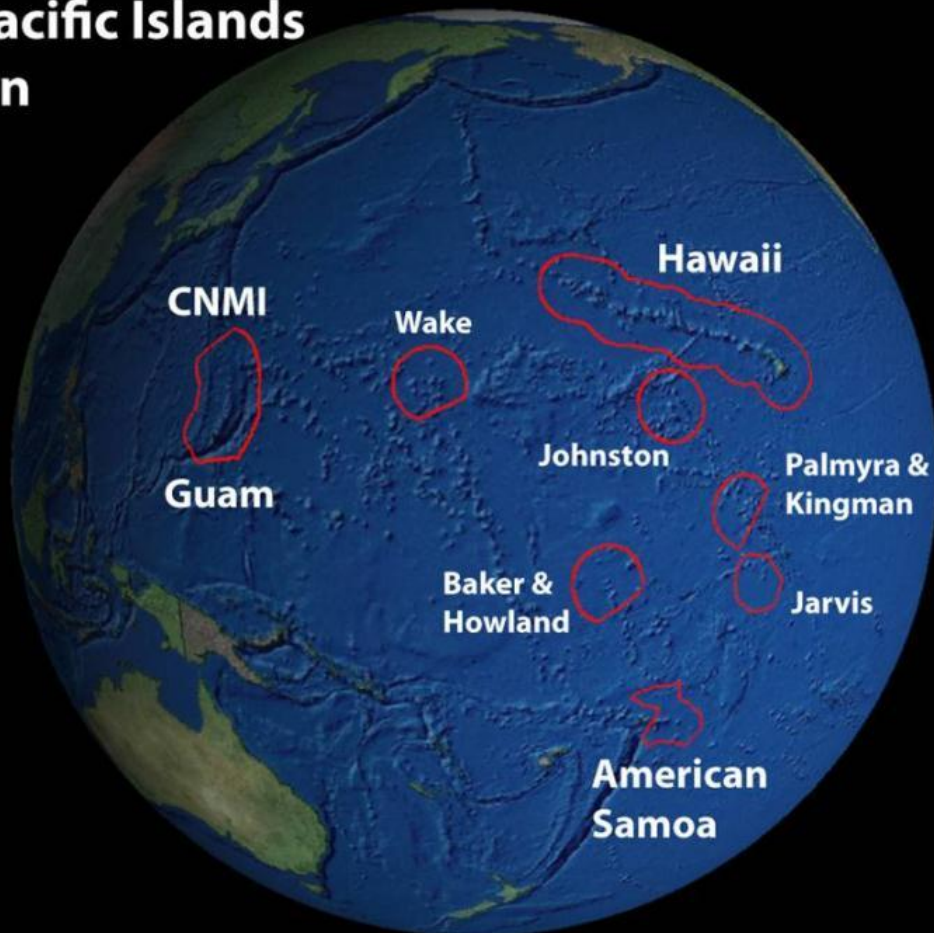
Provide timely, high-quality
applied scientific information
to support
the conservation and
management of fisheries,
protected species, and
marine habitats
in the central and western
Pacific Ocean

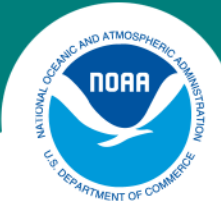




Vast Expanses, Many Cultures

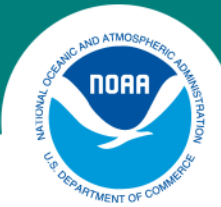
The Pacific Islands Region





Key Mandates

- **Magnuson-Stevens Fishery Conservation and Management Act**
- Endangered Species Act
- Marine Mammal Protection Act
- Coral Reef Conservation Act
- **International agreements/Regional Fishery Management**
- U.S. government administrative and executive orders (e.g., marine national monuments)



PIFSC Science Plan Overview

- **Purpose**
 - PIFSC strategic orientation
 - NMFS science enterprise approach
- **Orientation**
 - Mandate-driven
 - Themes
 - Monitor and Assess
 - Environment and Ecosystems
 - Maximizing Effectiveness
- **Published March 2013**
- **Next Step: Implementation planning**
 - Applying priorities to budgets



Science & Research

**Socioeconomics
Program**

**Fisheries Research
& Monitoring
Division**

**Protected
Species Division**

Operations & Management

Scientific Operations
(NEPA, Monuments, Permits,
Vessel Coordination, Small Boats)

**Ecosystems &
Oceanography
Division**

**Coral Reefs
Ecosystems
Division**

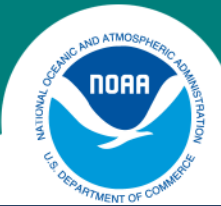
**Scientific Information
Services**

(Publications, Library,
Graphics Support)

Budget & Planning
(Program Planning &
Formulation)

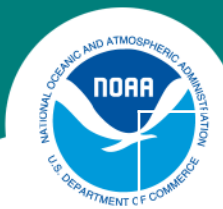
**Operations,
Management &
Information**

Public Affairs
(Public Affairs, Outreach &
Education)



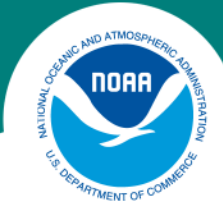
FY-14 Preliminary Budget Summary

Coral Reef Ecosystems: (including international and marine debris)	\$ 4,685,000
Ecosystems & Oceanography	\$1,075,000
Fisheries: (Fisheries monitoring & research, assessments, WPacFIN, life history, bio-sampling, ecology, territorial science)	\$ 8,545,000
Protected Species: (Hawaiian monk seal, sea turtles, cetaceans)	\$ 5,162,000
Scientific Services: (Including Science Operations, and Scientific Information & Monument science)	\$2,033,000
Socio-economics	\$ 817,000
Center Operations: (Operations-Information-Management, Facilities, etc.)	\$ 6,685,000
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TOTAL (all sources)	\$ 29,778,000



Center Staffing April 2014

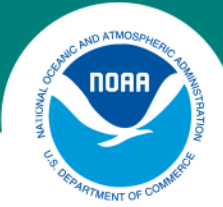
	Federal Employees	JIMAR & Other Employees	Total Staff
Fisheries Research & Monitoring Division	27	26	53
Protected Species Division	15	37	52
Ecosystems & Oceanography Division (including Coast/Ocean Watch)	5	5	10
Coral Reefs Ecosystems Division	6	54	60
Socio-economics Program	4	7	11
Scientific information and operations	20	8	28
Directors Office	5	0	5
Operations, Management, and Information (OMI)	23	3	26
Total	105	140	245



PIFSC External Reviews

- **2013 Fishery information**
- **2012 Stakeholder Feedback**
(no formal review)
- **2011 Sea Turtle Research and Monitoring**
- **2010 Data Management**
- **2009 Pelagics Research**
- **2008 Ecosystem Science**
- **2007 Center's Science Program**





Wrap-Up

Are we doing the right things right?

Provide advice on improving the quality, relevance and performance of PIFSC stock assessments





Mahalo

